accordance with the new form, No. 1040, and the arrangement of the columns, therefore, differs from those previously published.

Meteorological Observations at Honolulu, November, 1900.

The station is at 21° 18′ N., 157° 50′ W.
Hawaiian standard time is 10h 30m slow of Greenwich time. Honolulu local mean time is 10h 31m slow of Greenwich.
Pressure is corrected for temperature and reduced to sea level, and the gravity correction, —0.06, has been applied.
The average direction and force of the wind and the average cloudiness for the whole day are given unless they have varied more than usual, in which case the extremes are given. The scale of wind force is 0 to 12, or Beaufort scale. Two directions of wind, or values of wind force, or amounts of cloudiness, connected by a dash, indicate change from one to the other.
The rainfall for twenty-four hours is measured at 9 a. m. local, or 7.31 p. m., Greenwich time, on the respective dates.
The rain gage, 8 inches in diameter, is 1 foot above ground. Thermometer, 9 feet above ground. Ground is 43 feet, and the barometer 50 feet above sea level.

Date.	Pressure at sea level.	Temperature.		During twenty-four hours preceding 1 p. m., Greenwich time, or 2.29 a. m., Honolulu time.									Total rainfall at 9 a. m., local time.
				Temperature.		Means.		Wind.		Average cloudiness.	Sea-level pressures.		
		Dry bulb.	Wet bulb.	Maximum.	Minimum.	Dew-point.	Relative humidity.	Prevailing direction.	Force.		Maximum.	Minimum.	
	•	†	†			‡	‡		§				
1	29.97	75	68	80	70	66.3	70	ne.	6-4	5	30.02	29.94	0.02
2	30.04	74	67	80	74	65.7	68	ne.	3	3	30.08	29.95	0.19
3	30.05	70	66.5	79	69	62.7	66	ne.	6-4	5-3	30.11	30.03	0.60
4	30.02	71	64	76	67	62.5	72	ne.	4-5	8-5	30.11	30.02	0.13
5	30.01	71	64	76	66	60.7	64	ne.	3	5	30.07	29.97	0.05
6	29.98	72	64.5	78	68	62.3	68	ne-nne.	2-0	2-6	30.04	29.95	0.07
7	29.94	73	66	78	69	63.0	70	nne.	3	3	30.04	29.93	0.03
8	29.89	65	68	78	68	64.3	72	nne.	1-3-0	10	29.95	29.88	0.00
9	29.89	75	68	79	65	65.3	78	sw.	1-0	6	29.94	29.84	0.00
10	29.96	72	62.5	77	72	61.5	65	n-nne.	4-6	5-2	29.98	29.91	0.00
11	30.01	73	63	76	72	55.7	53	nne.	6	2-5	30.06	29.95	0.00
12	30.00	72	63	74	72	59.3	63	n-ne.	3-4	8	30.08	29.89	0.10
13	29.90	69	63.5	77	72	58.7	60	ne.	3-0	3	30.02	29.89	0.02
14	29.79	72	66	77	67	61.0	67	nne.	2-0	8-3	29.91	29.79	0.00
15	29.60	76	74	77	69	67.0	83	nne-s.	2-0-3	10	29.79	29.61	2.50
16	29.69	73	72.5	79	72	73.3	89	sw.	3-5	10	29.73	29.57	1.50
17	29 84	73	70	78	71	70.0	91	s-sw.	0-1	10-7	29.86	29.71	0.03
18	29.86	75	73	81	69	74.0	86	s-sw.	3-0	9-7	29.89	29.80	0.02
19	29.98	76	74.5	81	75	74.3	88	ssw.	2	8	29.99	29.86	0.01
20	29.98	68	67.5	83	76	72.5	86	ssw.	2-0	7-0	30.02	29.94	0.00
21	29.95	70	68.7	84	68	69.7	88	sw.	1-0	1-6-0	30.02	29.95	0.00
22	29.94	68	67	84	68	69.5	85	ssw.	1-0	4	29.98	29.89	0.00
23	29.96	69	67.5	83	67	69.7	85	sw-w.	1-0	0-5	29.98	29.90	0.02
24	29.94	74	69	80	67	67.3	79	nw-nne.	0-4	6	30.00	29.90	0.03
25	29.94	74	68.5	78	73	66.7	73	ene.	4-2	9-10	30.02	29.93	0.30
26	29.84	72	71.3	77	71	67.7	81	ne.	2	10	29.99	29.89	5.45
27	29.89	70	69.3	75	71	71.7	96	ne-w.	1-0	10	29.94	29.86	0.23
28	29.90	69	68.3	80	70	70.7	89	s.	1-0	7-10	29.93	29.85	0.00
29	29.93	75	69.5	80	69	69.3	84	sw-ne.	1-2	10-7	29.96	29.86	0.00
30	29.94	72	67	80	72	67.0	75	ne.	2-0	7-3	29.99	29.89	0.00
Sums.	......	......	......	......	......	......	......	....	.....	.....	......	......	11.30
Means.	29.921	71.9	67.6	78.8	69.9	66.3	76.6	....	2.2	5.7	29.983	29.882	.....
Departure.	—.028	......	......	......	......	+0.6	0.0	....	.....	+1.1	......	......	+5.78

Mean temperature for November, 1900 (6+2+9) ÷ 3 = 74.1; normal is 73.8. Mean pressure for November, 1900 (9+3) ÷ 2 = 29.929; normal is 29.957.
*This pressure is as recorded at 1 p. m., Greenwich time. †These temperatures are observed at 6 a. m., local, or 4.31 p. m., Greenwich time. ‡These values are the means of (6+9+2+9) ÷ 4. §Beaufort scale.

RECENT PAPERS BEARING ON METEOROLOGY.

W. F. R. PHILLIPS, in charge of Library, etc.

The subjoined list of titles has been selected from the contents of the periodicals and serials recently received in the library of the Weather Bureau. The titles selected are of papers or other communications bearing on meteorology or cognate branches of science. This is not a complete index of the meteorological contents of all the journals from which it has been compiled; it shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau:

Annalen der Physik. Leipzig. Vierte folge. Band 3.
Fischer, K. T. Ein neues Barometer (Luftdruckaräometer). P. 428.
Wedell-Wedellsborg, P. S. Notiz über die Ursachen der seculären Variationen des Erdmagnetismus. P. 540.
Wien, W. Zur Theorie der Strahlung schwarzer Körper, Kritisches. P. 530.

La Nature. Paris. 28me année.
Durand-Greville, E. Le nuage en sac ou mammatus. P. 401.

Geographische Zeitschrift. Leipzig. 6 Jahrg.
Koeppen, W. Versuch einer Klassifikation der Klimate, vorzugsweise nach ihren Beziehungen zur Pflanzenwelt. P. 593.

Bulletin of the American Geographical Society. New York. Vol. 32.
Turner, E. T. The Climate of New York. P. 101.

Nature. London. Vol. 63.
Lockyer, (Sir) Norman, and Lockyer, W. J. S. Solar Changes of Temperature and Variations in Rainfall in the region surrounding the Indian Ocean. P. 107.
Frankenfield, H. C. Kite Work of the United States Weather Bureau. P. 109.
Liveing, G. D. and Dewar, J. Spectroscopic Investigations of Gases in Atmospheric Air. P. 189.

Scientific American. New York. Vol. 83.
—— Shooting at the Clouds [for dispelling hail]. P. 371.

Scientific American Supplement. New York. Vol. 50.
Cordeiro, F. P. Tropical Hurricanes. P. 20858.

Ciel et Terre. Bruxelles. 21me année.
Hepites, S. Pluie extraordinaire en Roumanie. P. 442.
Sieberg, A. Funkenblitz. P. 261.

Quarterly Journal of the Royal Meteorological Society. London. Vol. 26.
Symonds, G. J. Wiltshire Whirlwind of October, 1899. P. 261.
Marriott, William. Rainfall in the West and East of England in Relation to Altitude above Sea Level. P. 273.
Baxendell, Joseph. Description of Halliwell's Self-recording Rain Gage. P. 281.
Ackermann, Eugene. Climate and Diseases of Northern Brazil. P. 288.

Das Wetter Berlin 17 Jahrg.
Polis, P. Das meteorologische Observatorium Aachen. P. 241.
Kassner, C. Meteorologische Beobachtungen auf einer Reise nach Bulgarien. P. 245.
Stade, H. Winterbilder vom Brocken. P. 258.

Archives des Sciences Physiques et Naturelles. Genève. 4me Période. Tome 10.
Gautier, R. Résumé météorologique de l'année 1899 pour Genève et le Grand Saint Bernard (suite). P. 467.

Zeitschrift für Gewässerkunde. Leipzig. Band 3.
Ototsky, P. Der Einfluss der Walder auf das Grundwässer. P. 153.

CLIMATE OF SPOKANE, WASH.

By CHARLES STEWART, Observer, Weather Bureau.

Spokane is situated in eastern Washington, in latitude 47° 40′ north, longitude 117° 25′ west, between the Rocky and Cascade mountains, at an elevation of about 1,900 feet above the sea level.

The United States Weather Bureau office in Spokane was established February 1, 1881, giving up to date, April, 1900, meteorological records for over eighteen years. In the preparation of the accompanying tables only *whole* years have been considered, leaving out the years 1881 and 1900, thus giving a record for eighteen years, from 1882 to 1899, both years inclusive.

Owing to limited space, it is not practicable to remark fully upon these tables, and we shall, therefore, simply make a few statements, principally bearing upon hygiene.

In comparing climates many people are inclined to be satisfied with a mere knowledge of the mean temperature, extremes of temperature, and, perhaps, the precipitation at a place; forgetting that several places may have an equality of temperature in every respect, etc., yet, owing to other important meteorological factors, differ widely as to climate.

The higher temperatures are shown to have risen above 90° each year, rising as high as 104°, August 8, 1898; this might lead one unacquainted with the climate of Spokane to suppose that prostration from heat, sunstroke, occurs at this place, but such is not the case; on the contrary, little inconvenience seems to accompany temperatures in this place that in other places induce prostration from heat, sunstroke is entirely unknown here, save by name.

There are two climatic factors worthy of particular attention with regard to Spokane, viz, the mean daily change of temperature, and the sensible temperature. The mean daily change of temperature is the change from the mean temperature of one day to that of the following day. This change is sometimes known as variability of temperature, and is most important in determining the character of a climate; the more equable climates have the smallest changes of mean daily temperature. At Spokane the mean daily change of temperature for several years is 3.7°. This shows that the transition from cold of winter to heat of summer, or vice versa, occurs gradually by comparatively small changes of mean daily temperature from day to day. Sudden, violent changes of temperature seldom occur here.

In order to understand what is meant by sensible temperature let us take the definition given in the MONTHLY WEATHER REVIEW, 1895, p. 93; 1898, p. 362; and 1899, p. 18.

The sensible temperature experienced by the human body and attributed to the atmosphere, depends not merely upon the temperature of the air, but equally upon the dryness and the wind. The temperature of the wet bulb thermometer, as obtained by the whirling apparatus used in a shaded shelter, corresponds to the temperature felt by persons standing in the shade of trees or houses, exposed to a natural breeze of at least 6 miles per hour. This temperature and its depression below the dry bulb are the fundamental data for all investigations into the relation between human physiology and the atmosphere.

There is no difference in construction between the dry bulb and wet bulb thermometers, excepting that the thermometer selected as wet bulb has its bulb carefully covered with specially prepared muslin, and is dipped in pure water before observation, hence the terms dry bulb and wet bulb, for the purpose of indicating which thermometer is meant. Immediately after dipping in water evaporation may set in from the bulb of the wet thermometer. This evaporation produces lowering of temperature, and the drier the air the greater the difference between the readings of the wet bulb and the dry bulb, the reading of the latter indicating the temperature of the air.

To fully appreciate the hygienic value of a comparatively low sensible temperature during the warm seasons, consider the afternoon observation taken at Spokane, August 2, 1895. The temperature was 94° in the shade, and the temperature of the wet thermometer, or sensible temperature, was only 62°; that is, a person in good health and in the shade experienced only

Climatological data for Spokane, Wash., for eighteen years, 1882 to 1899.

Year.	*Barometer. Mean height.	*Barometer. Highest.	*Barometer. Lowest.	Temperature. Mean annual.	Temperature. Highest.	Temperature. Lowest.	Temperature. Annual range.	Rainfall and melted snow. Total amount.	Rainfall and melted snow. Agricultural year, greater part of September-June, ten months.		Distribution of rain during period critical for agriculture. May.	June.	July.	Wind. Prevailing direction.	Wind. Highest hourly velocity.
	Inches.	Inches.	Inches.	°	°	°	°	Inches.		Ins.	Ins.	Ins.	Ins.		Miles.
1882	....	....	....	46.5	101.5	−17.0	118.5	25.99	1881-82	23.01	1.54	1.17	0.88	sw.	44
1883	28.01	28.68	27.33	46.8	96.7	−27.7	124.4	14.37	1882-83	22.06	2.11	0.60	0.00	sw.	37
1884	27.96	28.62	27.11	45.5	97.5	−17.8	115.3	20.56	1883-84	14.59	0.56	2.58	1.06	sw.	29
1885	27.98	28.50	27.43	50.1	99.3	−14.0	113.3	19.01	1884-85	18.84	1.53	3.40	0.39	sw.	33
1886	27.96	28.59	27.26	48.7	100.3	−10.5	110.8	15.86	1885-86	15.21	0.92	0.56	0.37	sw.	42
1887	27.98	28.61	27.15	47.2	97.3	−11.0	108.3	20.10	1886-87	18.69	1.06	2.07	1.41	sw.	31
1888	28.00	28.75	27.47	48.7	101.8	−30.5	132.3	17.69	1887-88	18.40	1.24	5.12	0.06	sw.	30
1889	28.00	28.57	27.41	49.1	96.0	−10.0	106.0	14.27	1888-89	12.35	1.70	0.39	0.46	sw.	30
1890	27.97	28.63	27.25	47.4	102.0	−23.0	125.0	16.57	1889-90	19.45	1.58	1.98	0.38	sw.	48
1891	27.95	28.58	26.98	49.0	97.0	−10.0	107.0	16.69	1890-91	12.35	0.60	3.28	1.12	sw.	48
1892	27.98	28.45	27.34	48.4	96.0	− 5.0	101.0	16.78	1891-92	14.45	2.40	0.72	1.22	s.	36
1893	27.97	28.60	27.28	45.7	99.1	−19.0	118.1	22.00	1892-93	20.08	2.50	0.42	0.36	s.	36
1884	27.97	28.61	27.32	48.2	97.5	− 1.9	99.4	17.84	1893-94	20.09	1.01	1.13	0.29	sw.	39
1895	28.00	28.52	27.27	48.0	95.0	8.0	87.0	13.46	1894-95	12.66	1.58	0.42	0.42	sw.	42
1896	27.96	28.56	27.38	48.6	100.0	−13.0	113.0	20.82	1895-96	14.78	2.29	0.73	0.17	sw.	37
1897	27.96	28.56	27.24	48.2	100.0	3.0	97.0	23.84	1896-97	21.43	1.05	3.51	0.98	sw.	37
1898	27.97	28.62	27.46	48.2	104.0	− 2.0	106.0	13.08	1897-98	18.64	1.63	1.21	0.43	s.	41
1899	27.94	28.50	27.23	47.2	98.0	−21.0	119.0	20.08	1898-99	13.27	1.02	0.56	0.30	s.	36
Average	27.97	.... 28.75†	.... 26.98‡	47.9	.... 104.0	.... −30.5	111.2	18.28		17.24	1.46	1.66	0.57	sw.	 48

Year.	Number of days. Clear.	Partly cloudy.	Cloudy.	0.01 inch or more rain or snowfall.	Temperature rose above 90°.	Temperature fell below 32°.	Mean relative humidity.	Thunderstorms.	Number of days and month in which temperature fell below zero.	Winters during which the temperature did not fall below zero.	Mean daily change in temperature.	Average hourly velocity of wind.	Frost. Last. Killing.	Frost. Last. Light.	Frost. First. Light.	Frost. First. Killing.
							%				°	Miles				
1882	92	132	141	141	17	121	68.6	17	8, Jan.	....	.....	.....	Mar. 20	May 20	Sept. 30	Nov. 2
1883	181	126	58	94	14	136	67.1	2	6, Jan.; 11, Feb.	....	.....	.....	Mar. 16	Apr. 5	Nov. 2	Oct. 3
1884	113	151	97	123	10	128	69.4	10	7, Feb.; 9, Dec.	....	.....	.....	Apr. 18	May 13	Sept. 12	Sept. 7
1885	141	137	87	116	15	84	75.5	10	4, Jan.	....	.....	.....	Mar. 19	Apr. 25	Nov. 3	Oct. 5
1886	176	114	75	104	14	113	70.6	6	6, Jan.	....	.....	.....	Mar. 2	Apr. 5	Sept. 28	Oct 10
1887	105	153	107	126	15	137	73.2	8	9, Feb.	....	.....	.....	Mar. 4	May 7	Sept. 22	Sept. 20
1888	98	111	157	106	28	115	68.4	4	9, Jan.	....	.....	.....	Apr. 17	May 21	Sept. 23	Oct. 18
1889	74	132	149	97	19	115	64.0	5	1, Dec.	1888-9	3.7	.....	Feb. 19	Apr. 17	Sept. 24	none ...
1890	98	120	147	117	14	122	62.0	3	5, Jan.; 4, Feb.	....	3.7	4.1	Jan. 11	May 30	Sept. 12	none ...
1891	82	122	161	123	17	108	61.0	5	3, Mar.	....	3.7	5.3	June 8	May 9	Oct. 1	Nov. 13
1892	104	124	188	119	10	103	62.0	2	2, Jan.	....	3.4	5.5	Feb. 18	May 4	Oct. 16	Sept. 21
1893	78	105	182	144	12	123	68.0	4	1, Jan.; 3, Feb.	....	3.8	5.8	Jan. 15	June 20	Aug. 10	Oct. 14
1894	62	118	185	137	19	107	64.2	6	1, Jan.; 2, Feb.	1894-5	3.9	6.5	Apr. 3	June 11	Sept. 23	none ...
1895	81	126	158	98	8	121	60.0	5	none	1895-6	3.6	6.1	none ...	June 14	Sept. 6	none ...
1896	97	99	170	118	22	92	63.3	3	3, Nov.	....	3.4	6.0	Apr. 20	May 27	Sept. 16	Oct. 27
1897	118	69	178	134	17	119	66.0	8	none	1897-8	4.0	5.6	Apr. 12	Apr. 27	Sept. 9	Oct. 3
1898	131	97	137	101	21	119	62.0	7	1, Dec.	....	3.5	6.2	May 7	May 24	Oct. 1	Oct. 5
1899	90	112	163	134	8	95	65.0	5	5, Jan.; 4, Feb.	1899-00	3.9	6.4	Mar. 17	May 15	Sept. 7	Oct. 14
Average	107	120	138	118	16	114	66.1	6	....	....	3.7	5.8	Mar. 21	May 13	Sept. 24	Oct. 10

* Barometer corrected for instrumental error and temperature (actual atmospheric pressure).
† Highest. ‡ Lowest. The dash (—) indicates temperature below zero.

a temperature of 62°, although the air temperature at the time was 94°, a difference of 32° between the air temperature and the sensible temperature. This is worthy of notice, as it is somewhat explanatory of the freedom from prostration from heat sunstroke, for which this section is noted. The sensible temperature is influenced by the relative humidity, and the low relative humidity during the warm portions of the year is one of the most important factors in freedom from sunstroke at Spokane.

The preceding meteorological data are taken from the eighth annual report of the Board of Health of Spokane, Wash., for the year ending December 31, 1899.

The above tabular statement gives the average relative humidity for this place as 66.1 per cent, but during the warmer months of the year the relative humidity often falls in the afternoon, about the warmest part of the day, to as low as 10 per cent, sometimes lower. For example, at the afternoon observation (taken in Spokane at 5 p. m., Pacific time), August 16, 17, and 18, 1895, the relative humidity was respectively 8, 7, and 5 per cent, but at the morning observation (5 a. m., Pacific time), August 17, 18, and 19, the relative humidity had risen to 51, 52, and 53 per cent, showing that the air does not remain long enough dry to be hurtful in some respects.

Each year, excepting the years 1895 and 1897, the temperature has fallen below zero at Spokane, but it is also shown that during the winters of 1888–89, 1894–95, 1895–96, 1897–98, and 1899–1900, the temperature did not fall as low as zero at this place. The lowest temperature recorded at Spokane since the opening of the Weather Bureau office here was 30.5° below zero, January 16, 1888, but it should be borne in mind in this connection that the winter of 1887–88 was one of great severity throughout the whole country. The lower temperatures do not prevail for many days at a time, but have days with much higher temperature between them.

The prevailing winds are from the southwest, and have a marked influence in tempering the cold of winter or heat of summer. The greatest velocity of wind ever recorded at Spokane was 48 miles per hour, once in 1890 and once in 1891, lasting for about five minutes each time; this place has remarkable freedom from violent winds, due in a great measure to the topography of the surrounding country.

Thunderstorms are rare and seldom if ever of the violent kind experienced in the Eastern States, many of the thunderstorms recorded in the following table have been reported for only a peal or two of distant thunder.

It has been estimated by agricultural experts that from 15 to 20 inches of precipitation per year suffice for the production of good crops in the agricultural sections near Spokane. Weather Bureau reports referring to Washington and Oregon indicate that "Agricultural operations are more fruitful with a small rainfall than in some sections of other States with considerably larger precipitation." An examination of the preceding table which shows the amount of precipitation for the greater part of the agricultural year indicates that a sufficiency of precipitation for agricultural needs has always fallen in this section; and the same table shows that in general the rainfall has been well distributed during the period critical for agriculture.

The actual atmospheric pressure given in the first part of the tabular statement should be of interest to physicians and others from a physiological point of view.

FOG STUDIES ON MOUNT TAMALPAIS.

By ALEXANDER G. MCADIE, Forecast Official.

In a previous paper attention was called to the prevalence of fog on the central coast of California, especially in the vicinity of the Bay of San Francisco. A few illustrations of fog drifts as photographed at the Weather Bureau observatory on Mount Tamalpais were given in the July issue of the MONTHLY WEATHER REVIEW. The differences in temperature, humidity, and air motion are so marked within comparatively small distances, both horizontally and vertically, in the bay district, that it seemed advisable to tabulate in comparative form the meteorological elements for a year at the higher station (elevation approximately half a mile) and the station at sea level. The present paper aims to present, with some photographic evidence of fog forms and drifts, a rough study of the air drainage of the locality, in which fog streams and counter streams are of such frequent occurrence that they serve excellently as exponents of air motion. The topography of the section is remarkable, because of the close juxtaposition of ocean, bay, mountain, and foothill. A valley, level as a table, 450 miles long and 50 miles wide, having afternoon temperatures of 100° or over, is connected by a narrow water passage with the Pacific Ocean, the mean temperature of the water in this locality being 55°. Thus within a distance of 50 miles in a horizontal direction there is frequently a difference of 50° in temperature, while in a vertical direction there is often a difference of 30° in an elevation of half a mile. High bluffs, ridges, and headlands are at such an angle to the prevailing strong westerly surface air currents that an air stream is forced with increased velocity through the Golden Gate, and there must of necessity be considerable piling up of both air and water vapor at this point. The locality may indeed be considered as a natural laboratory, in which experiments connected with cloudy condensation of water vapor are daily wrought, and it is therefore of more than passing interest to the meteorologist.

Much faithful work has been done in physical laboratories on the behavior of water vapor at varying volumes, pressures, and temperatures. Regnault, Thomson, Broch, Aitken, Kiessling, R. von Helmholtz, Hertz, Rayleigh, von Bezold, Barus, Marvin, and others have worked upon the change of state from vapor to liquid and from liquid to solid, and while many irregularities are noted in the behavior of water vapor, the general problems of decreasing volumes and increasing pressures until condensation points are reached, have been solved; and it is well understood that the vapor-liquid and liquid-solid condensations are in themselves but two phases in a chain of condensation phenomena. The problem of fog is therefore a limited one. It may be considered as a special case of cloud development, occurring in the first and second stages of Hertz, viz, the unsaturated and saturated stages. Condensation in the free air, as in these fog formations, takes place under conditions different from those obtaining in the laboratory. There are no fixed restraining walls, though the strongly stratified outlines suggest sharply limited air streams. Again saturation as it occurs in free, constantly changing air and true adiabatic saturation are not identical. Saturation in the free air must be studied under disadvantageous circumstances, for the work must be done at a distance, with instruments neither sufficiently delicate nor accurate, and there is no control of conditions possible. In passing, it may be noted that, except for traces of salt, the air of the section under consideration is partially filtered, as it presumably comes from off the broad ocean and is as free from land dust and smoke as normal air can be. Off-shore winds are infrequent and light.

An attempt has been made at the Mount Tamalpais station to correlate the surface pressure conditions with fog. There are, however, many different types of fog. The conditions prevailing in winter, when tule fog, formed in the great valleys, drifts slowly seaward, are very different from those prevailing in summer, when the sea fog is carried inland. A typical pressure distribution accompanying sea fogs has been